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Fig 1

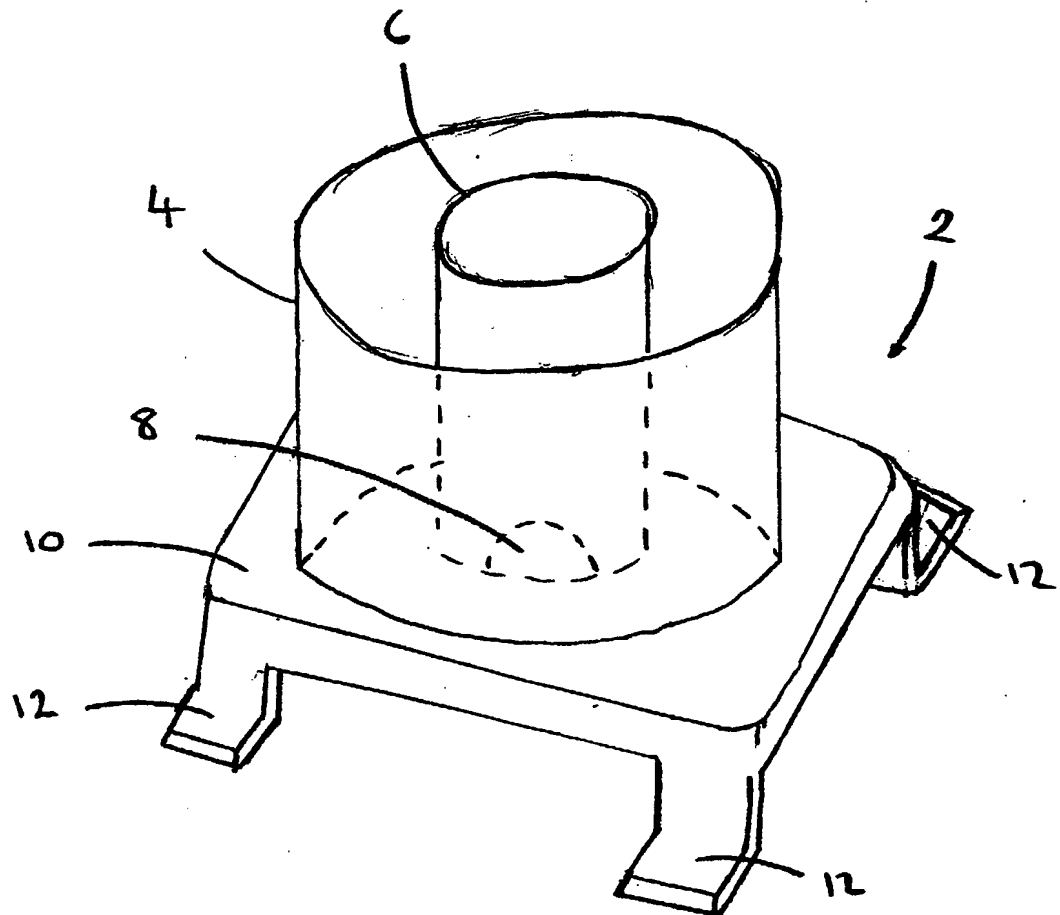
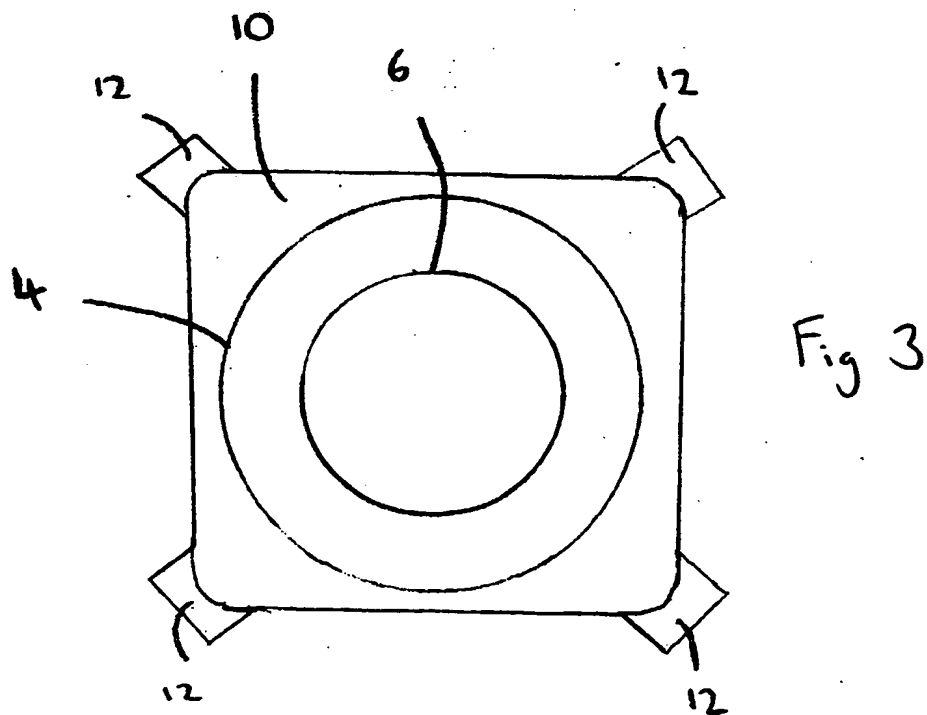
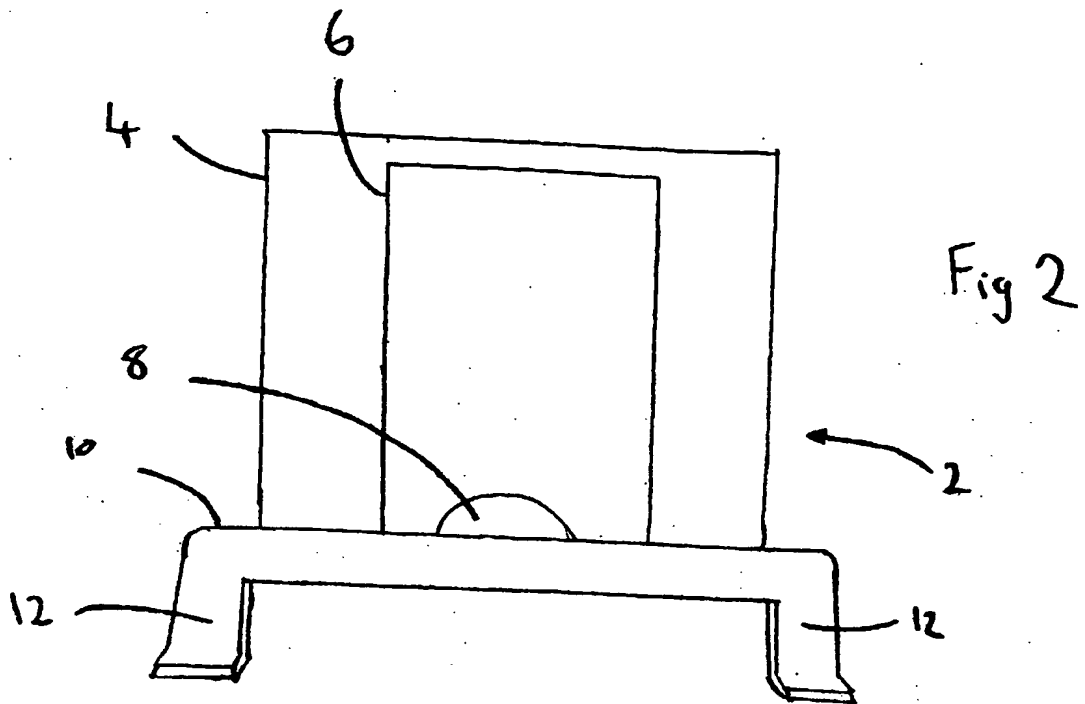


Fig 1



IMPROVEMENTS IN AND RELATING TO TREE STANDSField of the Invention

5 This invention relates to tree stands, and in particular, but not exclusively to Christmas tree stands. The invention also extends to a kit; and a method of securing a tree to a tree stand.

10 Background to the Invention

It is known to place cut trees in holders or stands to present the tree and enable it to be decorated with any desired items.

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Particularly it is know at Christmas time to place cut trees, usually fir or spruce trees, in Christmas tree stands so that the Christmas tree may be presented in a domestic environment and decorated with appropriate
20 Christmas decorations.

There are various types of stands available for securing a Christmas tree. One commonly used type of stand is a cut-out section of a tree trunk which has a recess cut or
25 bored partway through the section. The cut trunk end of a Christmas tree is simply inserted into the recess in the stand. The weight of the cut-out section effects stabilization of the Christmas tree and reduces the chance of the tree toppling. The circumference of the Christmas
30 tree is usually chosen to be substantially identical or slightly larger than the circumference of the recess in the stand, to enable a snug fit of the tree in the stand.

A problem with the above mentioned type of stand is that, due to the snug fit of the Christmas tree in the recess, there is no provision for a water reservoir which will enable the cut end of the tree to draw water and increase
5 the working lifetime of the tree.

A second known type of stand comprises a generally cylindrical tube having a number of apertures into which can be threaded screws, and when a tree is inserted into
10 the stand, the screws may be inserted such that they protrude into the cylinder and abut the trunk of the tree in order to tightly restrain the tree in the stand. The stand is commonly connected to, or forms part of, a weighted base member which helps to prevent the tree and
15 stand from toppling over in use.

A disadvantage with this type of stand is the need for a user to bend over or kneel in order to loosen and tighten screws once a tree has been inserted. This is
20 particularly problematical for elderly or infirm persons. Furthermore, the screws commonly work loose over a period of time, especially if the tree is agitated, for example when being decorated.

25 It is therefore an aim of preferred embodiments of the present invention to overcome or mitigate a problem of the prior art, whether expressly stated herein or not.

Summary of the Invention

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According to the present invention there is provided a tree stand comprising a fluid reservoir about a tree

retaining member, wherein the fluid reservoir and tree retaining member are in fluid communication.

Suitably the tree retaining member is mounted within the fluid reservoir. Preferably the tree retaining member does not substantially protrude from the fluid reservoir.

Preferably the fluid reservoir comprises a cylindrical member being closed at one end thereof, and the tree retaining member is connected to the closed end of the cylindrical member. Preferably the tree retaining member comprises a cylindrical member, and may be connected concentrically within the fluid reservoir to the closed end thereof. Preferably the tree retaining member is the sole means for retaining a tree in the tree stand. Thus preferably, a tree inserted into the tree retaining member is solely retained by abutment of the tree with the interior surface of the tree retaining member. Thus preferably the tree retaining member does not comprise mechanical means to retain a tree. Thus in order to retain a tree in the tree stand a user does not have to effect operation of any mechanical means such as screws or bolts, and does not therefore have to kneel or bend to the ground level to insert and retain the tree.

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Preferably the cylindrical length of the tree retaining member is substantially identical to or less than the cylindrical length of the fluid reservoir.

30 Thus in a preferred embodiment the fluid reservoir and tree retaining member both comprise generally cylindrical members with the tree retaining member being connected

concentrically within the fluid reservoir to the closed end of the fluid reservoir.

5 Preferably the tree retaining member comprises an aperture therein which effects fluid communication between the tree retaining member and the fluid reservoir.

10 Suitably the aperture is formed at or near to the portion of the tree retaining member connected to the fluid reservoir.

The tree stand may further comprise weighting means. Preferably the weighting means comprises a base member which may be connected to the fluid reservoir or formed
15 integrally with the fluid reservoir.

20 Preferably the base member comprises a plurality of legs, which in use, are arranged to engage a surface on which the tree stand is mounted.

The tree stand may be of any suitable material, but is preferably metal (including alloy) and is more preferably constructed from iron, cast iron, aluminium or stainless steel.

25 According to a second aspect of the present invention there is provided a kit comprising a tree stand of the first aspect of the invention and a tree.

30 Preferably the tree is a cut tree suitable for use as a Christmas tree.

Suitably the cut tree comprises a trunk which in the region of the cut end thereof, has a circumference substantially identical to the interior circumference of the tree retaining member.

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According to a third aspect of the present invention there is provided a method of securing a cut tree in a tree stand, the method comprising the steps of:

- 10 (a) providing a tree stand comprising a fluid reservoir about a tree retaining member, the fluid reservoir and tree retaining member being in fluid communication;
- (b) shaping a portion of the trunk of the cut tree at
15 the cut end of the tree such that its surface dimensions are substantially identical to the interior dimensions of the tree retaining member; and
- (c) inserting the shaped portion of the trunk into
20 the tree retaining member such that the tree is secured to the interior of the tree retaining member by abutment of the tree with the interior surface of the tree retaining member.

25 By cut tree we mean a tree which has been cut by any suitable means to provide a cut end of the trunk of the tree distal to the apex of the tree. Thus trees may be cut by chopping, cutting, sawing and the like for example.

30 The cut end of the trunk of the tree may be shaped by any suitable means, including sawing, chopping, shaving, planing or the like.

Preferably the method further comprises the step of adding water to the fluid reservoir, and water may be added to partly or completely fill the reservoir.

- 5 Preferably the tree stand is as described for the first aspect of the invention.

Brief Description of the Drawings

- 10 For a better understanding of the various aspects of the invention, and to show how embodiments of the same may be put into practice, a specific embodiment will now be described, with reference to the accompanying drawings, in which:

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Figure 1 illustrates a perspective view of a preferred embodiment of the tree stand of the invention;

- 20 Figure 2 illustrates a side sectional view of the embodiment shown in Figure 1;

Figure 3 illustrates a plan view of the embodiment of Figures 1 and 2.

25 Description of the Preferred Embodiment

- Referring to Figures 1 to 3 a tree stand 2 comprises a weighting means in the form of a base 10 which includes four legs 12. Connected to the base 10 is a fluid
30 reservoir 4 which is cylindrical in shape. Connected concentrically within the fluid reservoir 4 on the base 10, is a tree retaining member 6 which is cylindrical in shape. The tree retaining member 6 comprises an aperture

8 located at the connection between the retaining member 6 and the base 10, which allows fluid communication between the retaining member 6 and the fluid reservoir 4.

5 In use, a tree, such as a Christmas tree, which has been cut down by any suitable means, first has its trunk, at the cut end thereof, shaped to substantially the identical circumference as the interior circumference of the retaining member 6.

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The cut end of the tree is then inserted into the retaining member 6. As the circumference of the cut end of the tree is substantially identical to the interior circumference of the retaining member 6, the tree is held
15 tight in the tree stand 2 without the need to use any mechanical means such as screws, bolts or the like, to secure the tree in the stand and prevent it moving about within the stand. As mechanical means are not needed to secure the tree, the tree stand of the embodiment shown in
20 Figures 1-3 is easy to use and a tree can be inserted without the user having to bend down to ground level and actuate mechanical means. Thus the tree stand 2 is particularly suited for use to elderly and infirm persons.

25 When the tree has been inserted into the stand 2, water is then poured into the fluid reservoir 4 to a desired level.

The presence of the aperture 8 in the retaining member 6 allows water to flow into the interior of the retaining
30 member 6 around the cut end of the tree. Thus water can be absorbed through the cut end of the tree in order to increase the useful life of the tree, and reduce dehydration of the tree.

The base 10 of the stand 2 helps to weight the stand 2 and tree to prevent the tree from toppling in use or when agitated or accidentally knocked.

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The reader's attention is directed to all papers and documents which are filed concurrently with or previous to this specification in connection with this application and which are open to public inspection with this
10 specification, and the contents of all such papers and documents are incorporated herein by reference.

All of the features disclosed in this specification (including any accompanying claims, abstract and
15 drawings), and/or all of the steps of any method or process so disclosed, may be combined in any combination, except combinations where at least some of such features and/or steps are mutually exclusive.

20 Each feature disclosed in this specification (including any accompanying claims, abstract and drawings), may be replaced by alternative features serving the same, equivalent or similar purpose, unless expressly stated otherwise. Thus, unless expressly stated otherwise, each
25 feature disclosed is one example only of a generic series of equivalent or similar features.

The invention is not restricted to the details of the foregoing embodiment(s). The invention extend to any novel
30 one, or any novel combination, of the features disclosed in this specification (including any accompanying claims, abstract and drawings), or to any novel one, or any novel

combination, of the steps of any method or process so disclosed.

Claims

1. A tree stand comprising a fluid reservoir about a tree retaining member, wherein the fluid reservoir and tree retaining member are in fluid communication.
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2. A tree stand as claimed in Claim 1, wherein the tree retaining member is mounted within the fluid reservoir.
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3. A tree stand as claimed in Claim 2, wherein the tree retaining member does not substantially protrude from the fluid reservoir.
- 15 4. A tree stand as claimed in any preceding claim, wherein the fluid reservoir comprises a cylindrical member being closed at one end thereof, and the tree retaining member is connected to the closed end of the cylindrical member.
- 20 5. A tree stand as claimed in any preceding claim, wherein the tree retaining member comprises a cylindrical member.
- 25 6. A tree stand as claimed in Claim 5, wherein the tree retaining member is connected concentrically within the fluid reservoir.
- 30 7. A tree stand as claimed in any preceding claim, wherein a tree inserted into the tree retaining member in use, is solely retained by abutment of the tree with the interior surface of the tree retaining member.

8. A tree stand as claimed in any preceding claim, wherein the tree retaining member does not comprise any mechanical means to retain a tree.

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9. A tree stand as claimed in Claim 5 or 6, wherein the cylindrical length of the tree retaining member is substantially identical to or less than the cylindrical length of the fluid reservoir.

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10. A tree stand as claimed in any preceding claim, wherein the tree retaining member comprises an aperture therein which effects fluid communication between the tree retaining member and the fluid reservoir.

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11 A tree stand as claimed in Claim 10, wherein the aperture is formed at or near to the portion of the tree retaining member connected to the fluid reservoir.

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12. A tree stand as claimed in any preceding claim, further comprising weighting means.

25 13 A tree stand as claimed in Claim 12, wherein the weighting means comprises a base member connected to or integrally formed with the fluid reservoir.

14. A kit comprising a tree stand of any one of Claims 1 to 13 and a tree.

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15. A kit as claimed in Claim 14, wherein the tree is a cut tree suitable for use as a Christmas tree.

16. A kit as claimed in Claim 15, wherein the cut tree comprises a trunk which in the region of the cut end thereof has a circumference substantially identical to the interior circumference of the tree retaining member.

17. A method of securing a cut tree in a tree stand, the method comprising the steps of:

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(a) providing a tree stand comprising a fluid reservoir about a tree retaining member, the fluid reservoir and tree retaining member being in fluid communication;

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(b) shaping a portion of the trunk of the cut tree at the cut end of the tree such that its surface dimensions are substantially identical to the interior dimensions of the tree retaining member; and

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(c) inserting the shaped portion of the trunk into the tree retaining member such that the tree is secured to the interior of the tree retaining member by abutment of the tree with the interior surface of the tree retaining member.

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18. A method as claimed in Claim 17, further comprising the step of adding water to the fluid reservoir.

19. A method as claimed in Claim 17 or 18, wherein the tree stand is as claimed in any one of Claims 1 to 13.

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20. A tree stand substantially as described herein with reference to the accompanying drawings.

21. A method as substantially described herein, with reference to the accompanying drawings.

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Application No: GB 0201805.9
Claims searched: 1 - 21

Examiner: Paul Nicholls
Date of search: 30 May 2003

Patents Act 1977 : Search Report under Section 17

Documents considered to be relevant:

Category	Relevant to claims	Identity of document and passage or figure of particular relevance	
X	1-3, 10, 11, 14, 15	US 5,086,583 A	(BREEN) - See retaining member 18, opening 24
X	1-6, 9, 14-16	NL 9000232 A	(ELHO) - See socket section 2, slots 3
X	1-6, 9-11, 14, 15	FR 2 280 346 A1	(TERNY) - See figure 1
X	1-3, 10, 11, 14, 15	US 5,987,813 A	(LASKO) - See cup 59, slots 60
X	1, 2, 4-6, 10, 11, 14, 15	EP 0,240,786 A1	(MEIDEL) - See figure
X	1, 2, 4-6, 10, 11, 14, 15	DE 297 03 002 U1	(PAULI) - See figure 1
X	1-3, 10, 11, 14, 15	US 5,779,215 A	(DEMASI) - See cylinder 12, perforated stop 28
X	1-3, 10, 11, 14, 15	DE 34 21 733 A1	(LANGER) - See figure 1

Categories:

X Document indicating lack of novelty or inventive step	A Document indicating technological background and/or state of the art.
Y Document indicating lack of inventive step if combined with one or more other documents of same category.	P Document published on or after the declared priority date but before the filing date of this invention.
& Member of the same patent family	E Patent document published on or after, but with priority date earlier than, the filing date of this application.

Field of Search:

Search of GB, EP, WO & US patent documents classified in the following areas of the UKC⁶:

A4L

Worldwide search of patent documents classified in the following areas of the IPC⁷:

A47G

The following online and other databases have been used in the preparation of this search report:

WPI, EPODOC, JAPIO

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